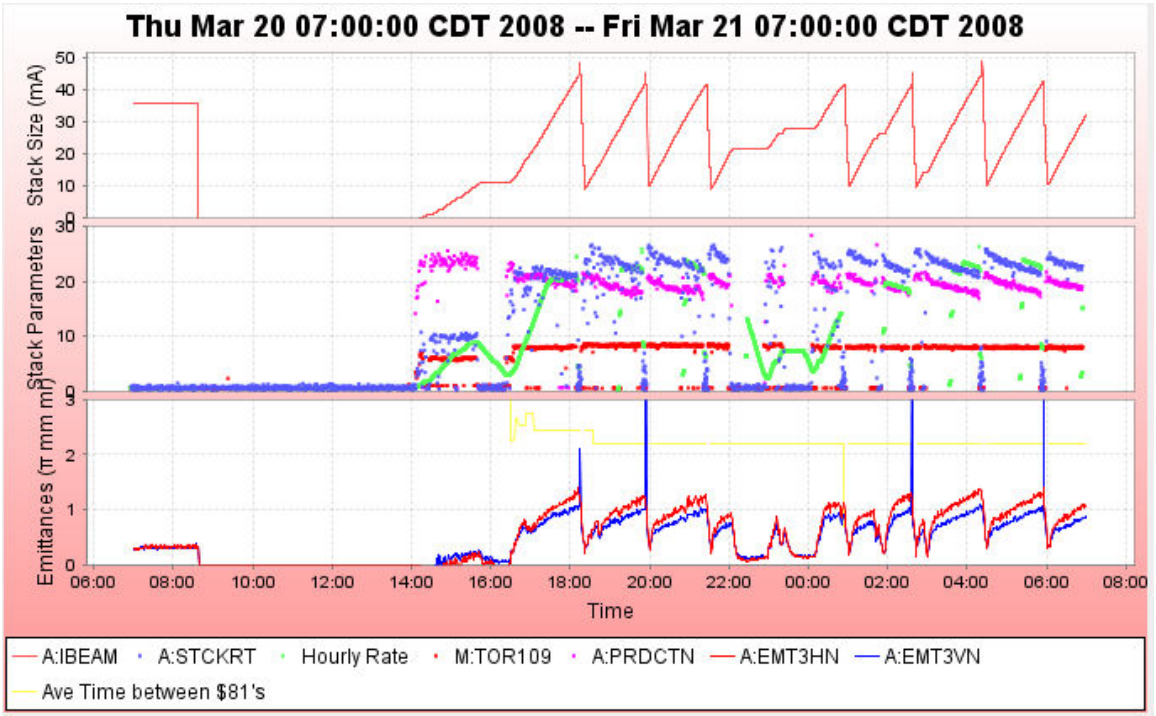
2008-03-21 Pbar Morning Summary

Friday, March 21, 2008
7:24 AM

Stacking

- Protons on target
  - 7.7e12 at 11 turns for the last six hours of the evening shift.
  - Went down to 10 turns and ran 7.4e12 over the owl shift.
- Best stacking hour was 23.34 mA.
- D:Q724 reading went to zero.
  - Bernard Wisner found that the power supply was not putting out power.
  - Bernie replaced the power supply monitor module.



Transfers

- The last three transfers have had poor transfer efficiency. Even the ACC to MI efficiency, which is usually 96-97%, is down a few percent. We will need to investigate.

investigate.

Column 1 Number_0_Pbar	Column 4 Number_3_Transfer Time		Column 21 Number_20_A:IBEAMB sampled	Column 22 Number_21_A:IB	Unstacked (mA)	Column 23 Number_22_R:BE	Column 24 Number_23_R:BE	Stashed	Acc to RR Eff	Column 27 Number_26_MI	Column 28 Number_27_MI Before	Acc to MI Eff	Acc to MI2 Eff	Transfers	Sets
		7:00:00 AM			194.999			176.37	90.45%	185.213	184.866	94.98%	94.80%	18	6
7464	Friday, March 21, 2008	5:56:15 AM	42.787	10.588	32.199	178.440	206.464	28.02	87.03%	30.370	30.411	94.32%	94.45%	3	1
7463	Friday, March 21, 2008	4:23:42 AM	44.988	10.188	34.800	148.186	178.924	30.74	88.33%	32.859	32.573	94.42%	93.60%	3	1
7462	Friday, March 21, 2008	2:37:33 AM	41.588	9.788	31.800	119.542	148.613	29.07	91.42%	30.253	30.173	95.14%	94.88%	3	1
7461	Friday, March 21, 2008	12:54:43 AM	41.788	9.988	31.800	90.515	119.841	29.33	92.22%	30.416	30.415	95.65%	95.64%	3	1
7460	Thursday, March 20, 2008	9:27:06 PM	41.788	8.988	32.800	60.683	90.931	30.25	92.22%	31.221	31.108	95.19%	94.84%	3	1
7459	Thursday, March 20, 2008	7:54:09 PM	41.788	10.188	31.600	31.983	60.945	28.96	91.65%	30.094	30.186	95.23%	95.53%	3	1

Studies

- Double notch filter studies
  - http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar08&action=view&page=121&scroll=false&load=

Access

Pbar

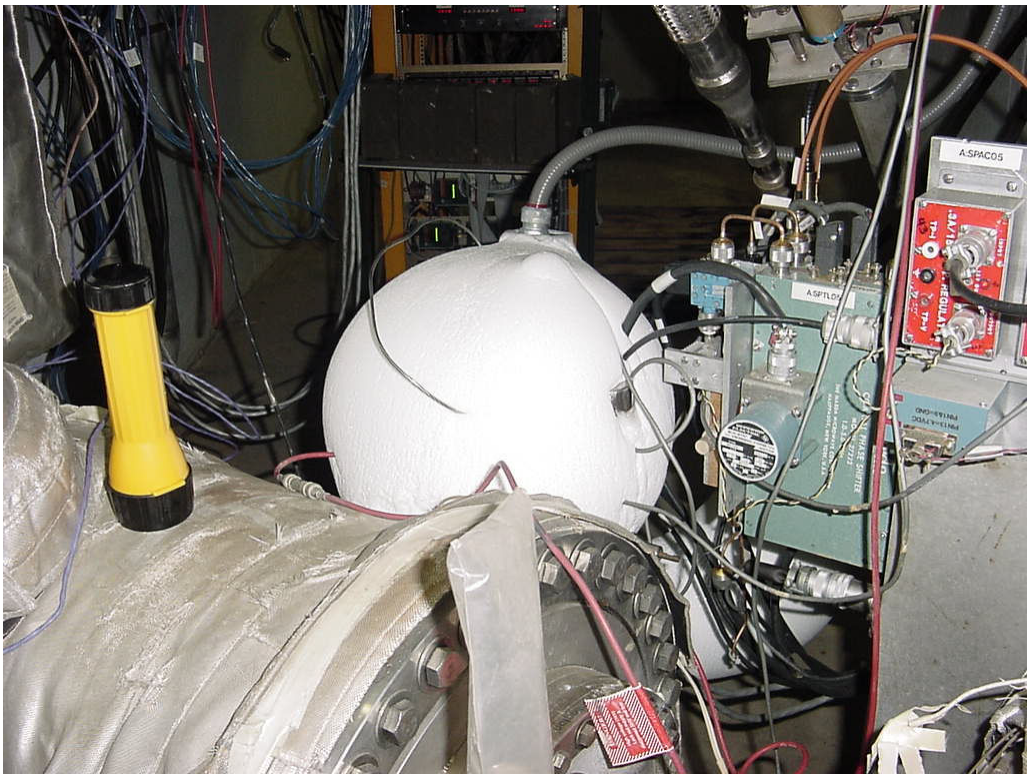
ID	Requestor	Title	Location	Type
7732	Gollwitzer, Keith	Inspection of Pbar Rings Inspection of Pbar tunnel; search for water leaks and ground water etc.	Rings enclosure	Misc
7774	Leveling, Anthony	Prepare 10mm-2 lens/transformer Inspect/prepare 10 mm-2 lens/transformer for installation on spare module 1. Install 10 mm-2 lens on spare module 1. We could use two 2-3 hour down periods to get the lens installed on the module, leak checked, and hipotted. This should reduce the time required to install a spare l0 mm lens in the target vault by as much as 5 hours.	AP0 upper vault	Target Station
7828	Oberholtzer, Robert	Fix Leak on D:QF Fix Leak on D:QF power supply.	AP10	Power Supply
7709	Peterson, David	Inspect Motor Dial Indicators Inspect tolerances on the dial indicators used on some of the older movable stands.	Movable Stands	Controls
7751	Seifrid, Peter	Debuncher Double Notch Filter Recheck Gain Balance on the double notch filter	A30 Stub Room	Stochastic Cooling
7664	Worel, Chuck	Test P-Bar Radiation Monitors Test P-Bar Radiation Monitors. 6 MONTH TEST DUE DATE IS 04/09/08.	P-Bar Service Buildings	ES&H / Interlocks
7667	Worel, Chuck	Vault ESS TestPre Test of the Vault ESS, 6 MONTH TEST DUE DATE IS 3/26/08. See Acc Div ES&H / Interlock Web Site for affected areas. All Keys are needed for ESS tests	AP0 S.B.	ES&H / Interlocks
7669	Worel, Chuck	Transport ESS Test Test of the Transport ESS, 6 MONTH TEST DUE DATE IS 4/10/08. See Acc Div ES&H / Interlock Web Site for affected areas. All Keys are needed for ESS tests	Transport Enclosure	ES&H / Interlocks

- LCW Leak on bleeder valve at A10-1 Stub. After examining our pictures of the leak, Mechanical support estimates 8 hours to repair. They say they will have to isolate and drain the system and the working space is not ideal.

and drain the system and the working space is not ideal.

Pasted from <http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar08&action=view&page=-1665&button=yes>

- ICW Balls on Stacktail tanks near A60 stub. Cryo opted not to send anyone in on short notice to look. We went back in and took pictures. Cryo reduced flows in order to shrink iceballs, but we should watch temperatures on the cryo system. Cryo has examined the pictures and have made an electronic worklist request (http://www-bd.fnal.gov/cgi-worklist/worklist_form.pl?id=7834)



Pasted from <http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar08&action=view&page=-1673&button=yes>

Other

- Paul's Number
  - Most in an hour: 23.34 mA at Fri Mar 21 05:29:16 CDT 2008
  - Best: 25.19 mA on 30-Jan-08
  - Average Production 20.93 e-6/proton Best: 25.41 e-6/proton on 01/30/2008
  - Average Protons on Target 5.41 e12 Best: 8.77 e12 on 07/24/2007
  - Largest Stack .00 mA Best: 313.58 mA on 02/18/2008
- Al's Numbers
  - Stacking
    - Pbars stacked: 261.71 E10
    - Time stacking: 14.94 Hr
    - Average stacking rate: 17.51 E10/Hr
  - Uptime
    - Number of pulses while in stacking mode: 22217
    - Number of pulses with beam: 18782
    - Fraction of up pulses was: 84.54%
  - The uptime's effect on the stacking numbers
    - Corrected time stacking: 12.63 Hr
    - Possible average stacking rate: 20.72 E10/Hr
    - Could have stacked: 309.57 E10/Hr
  - Recycler Transfers
    - Pbars sent to the Recycler: 229.38 E10
    - Number of transfers : 21
    - Number of transfer sets: 7
    - Average Number of transfer per set: 3.00
    - Time taken to shoot: 00.82 Hr
    - Time per set of transfers: 07.05 min
    - Transfer efficiency: 90.89%
  - Other Info
    - Average POT : 7.29 E12
    - Average production: 19.11 pbars/E6 protons

    * Red indicates a problem during data retrieval. See the message window for details.
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